It is probable that similar phenomena may be seen in many, if not all, bodies which reflect coloured light after the manner of opals. A magnificent specimen of Lumacelli, or Fiery Limestone, from Italy, kindly presented to me by my friend David Forbes, shows two sharp narrow and parallel bands in the red. I have also observed similar appearances in mother-of-pearl. The effects can be imitated to a certain extent by examining "Newton's rings," formed between two plates of glass, in the spectrum-instrument.

June 3, 1869.

The Annual Meeting for the election of Fellows was held this day.

Lieut.-General SABINE, President, in the Chair.

The Statutes relating to the election of Fellows having been read, Mr. Balfour Stewart and Dr. Maxwell Simpson were, with the consent of the Society, nominated Scrutators to assist the Secretaries in examining the lists.

The votes of the Fellows present having been collected, the following Candidates were declared to be duly elected into the Society.

Sir Samuel White Baker, M.A.
John J. Bigsby, M.D.
Charles Chambers, Esq.
William Esson, Esq., M.A.
Prof. George Carey Foster, B.A.
William W. Gull, M.D.
J. Norman Lockyer, Esq.
John Robinson M^{c}Clean, Esq.
St. George Mivart, Esq.
John Russell Reynolds, M.D.
Vice-Admiral Sir Robert Spencer Robinson, K.C.B.
Major James Francis Tennant, R.E.
Prof. Wyville Thomson, LL.D.
Col. Henry Edward Landor Thuillier, R.A.
Edward Walker, Esq., M.A.

Thanks were voted to the Scrutators.

June 10, 1869.

Lieut.-General SABINE, President, in the Chair.

Dr. J. J. Bigsby, Prof. G. Carey Foster, Mr. J. R. M^{c}Clean, Mr. St. George Mivart, and Dr. J. Russell Reynolds were admitted into the Society.

The following communications were read:—

I. "Researches on Gaseous Spectra in relation to the Physical Constitution of the Sun, Stars, and Nebulæ."—Second Note. By E. Frankland, F.R.S., and J. N. Lockyer. Received May 5, 1869.

We beg to lay before the Royal Society some further results of the researches on which we are engaged.